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Pro Pro Pro Ser Leu Pro Leu Ser Pro Pro Pro Ile Ser Pro Ser Ser
Tyr Phe Ala Ile Pro Pro Gly Leu Ser Pro Ala Glu Leu Leu Asp Ser
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|   | Gly<br>385 | Ser        | Arg        | Thr        | Val        | Arg<br>390 | Glu        | Pro        | Arg        | Val        | Val<br>395 | Val        | Gln        | Thr        | Thr        | Ser<br>400 |
|   | Asp        | Ile        | Asp        | Ile        | Leu<br>405 | Asp        | Asp        | Gly        | Tyr        | Arg<br>410 | Trp        | Arg        | Lys        | Tyr        | Gly<br>415 | Gln        |
|   | Lys        | Val        | Val        | Lys<br>420 | Gly        | Asn        | Pro        | Asn        | Pro<br>425 | Arg        | Ser        | Tyr        | Tyr        | Lys<br>430 | Cys        | Thr        |
|   | His        | Pro        | Gly<br>435 | Cys        | Pro        | Val        | Arg        | Lys<br>440 | His        | Val        | Glu        | Arg        | Ala<br>445 | Ser        | His        | Asp        |
|   | Leu        | Arg<br>450 | Ala        | Val        | Ile        | Thr        | Thr<br>455 | Tyr        | Glu        | Gly        | Lys        | His<br>460 | Asn        | His        | Asp        | Val        |
|   | Pro        | Ala        | Ala        | Arg        | Gly        | Ser        |            | Ser        | His        | Ser        | Val<br>475 |            | Arg        | Pro        | Met        | Pro<br>480 |

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Asn Asn Ala Ser Asn His Thr Asn Thr Ala Ala Thr Ser Val Arg Leu Pro Val Ile His Gln Ser Asp Asn Ser Leu Gln Asn Gln Arg Ser Gln Ala Pro Pro Glu Glu Gly Gln Ser Pro Phe Thr Leu Glu Met Leu Gln Ser Fro Gly Ser Phe Gly Phe Ser Gly Phe Gly Asn Pro Met Gln Ser 530
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Tyr Val Asn Gln Gln Gln Leu Ser Asp Asn Val Phe Ser Ser Arg Thr 545 550 555 560

Lys Glu Glu Pro Arg Asp Met Phe Leu Glu Ser Leu Cys 565 570 575

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<212> PRT

<213> Triticum aestivum

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Thr Ser Arg Thr Ala Pro Met Ala Asp Ser Pro Asn Pro Ser Ser Gly  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Asp Leu Pro Ser Ala Ala Gly Ser Ser Pro Glu Lys Pro Tyr Pro Ala 20 25 30

Asp Arg Arg Val Ala Ala Leu Ala Gly Ala Gly Ala Arg Tyr Lys Ala 35 40 45

Met Ser Pro Ala Arg Leu Pro Ile Ser Arg Glu Pro Cys Leu Thr Ile 50 55 60

Pro Ala Gly Phe Ser Pro Ser Ala Leu Leu Asp Ser Pro Val Leu Leu 65 70 75 80

Thr Asn Phe Lys Val Glu Pro Ser Pro Thr Thr Gly Ser Leu Ser Met 85 90 95

Ala Ala Ile Met His Lys Ser Ala His Pro Asp Ile Leu Pro Ser Pro 100 105 110

Arg Asp Lys Ser Ile Arg Ala His Glu Asp Gly Gly Ser Arg Asp Phe 115 120 125

Glu Phe Lys Pro His Leu Asn Ser Ser Ser Gln Ser Leu Ala Pro Ala 130 135 140

Met Ser Asp Leu Lys Lys His Glu His Ser Met Gln Asn Gln Ser Met 145 150 155 160

Asn Pro Ser Ser Ser Ser Asn Met Val Asn Glu Asn Arg Pro Pro 165 170 175

Cys Ser Arg Glu Ser Ser Leu Thr Val Asn Val Ser Ala Pro Asn Gln 180 185 190

Pro Val Gly Met Val Gly Leu Thr Asp Asn Met Pro Ala Glu Val Gly 195 200 205

Thr Ser Glu Pro Gln Gln Met Asn Ser Ser Asp Asn Ala Met Gln Glu 210 215 220

Pro Gln Ser Glu Asn Val Ala Asp Lys Ser Ala Asp Asp Gly Tyr Asn 225 230 235 240

Trp Arg Lys Tyr Gly Gln Lys His Val Lys Gly Ser Glu Asn Pro Arg 245 250 255

Ser Tyr Tyr Lys Cys Thr His Pro Asn Cys Glu Val Lys Lys Leu Leu 260 265 270

Glu Arg Ala Val Asp Gly Leu Ile Thr Glu Val Val Tyr Lys Gly Arg 280 His Asn His Pro Lys Pro Gln Pro Asn Arg Arg Leu Ala Gly Gly Ala Val Pro Ser Asn Gln Gly Glu Glu Arg Tyr Asp Gly Ala Ala Ala Asp Asp Lys Ser Ser Asn Ala Leu Ser Asn Leu Ala Asn Pro Val Asn 325 330 Ser Pro Gly Met Val Glu Pro Val Pro Val Ser Val Ser Asp Asp 345 Ile Asp Ala Gly Gly Gly Arg Pro Tyr Pro Gly Asp Asp Ala Thr Glu 360 Glu Asp Leu Glu Ser Lys Arg Arg Lys Met Glu Ser Ala Gly Ile Asp Ala Ala Leu Met Gly Lys Pro Asn Arg Glu Pro Arg Val Val Val Gln Thr Val Ser Glu Val Asp Ile Leu Asp Asp Gly Tyr Arg Trp Arg Lys Tyr Gly Gln Lys Val Val Lys Gly Asn Pro Asn Pro Arg Ser Tyr Tyr 425 Lys Cys Thr Ser Thr Gly Cys Pro Val Arg Lys His Val Glu Arg Ala Ser His Asp Pro Lys Ser Val Ile Thr Thr Tyr Glu Gly Lys His Asn 455 His Glu Val Pro Ala Ala Arg Asn Ala Thr His Glu Met Ser Ala Pro 465 470 Pro Met Lys Asn Val Val His Gln Ile Asn Ser Ser Met Pro Ser Ser 490 Ile Gly Gly Met Met Arg Ala Cys Glu Ala Arg Asn Phe Ser Asn Gln Tyr Ser Gln Ala Ala Glu Thr Asp Asn Val Ser Leu Asp Leu Gly Val Gly Ile Ser Pro Asn His Ser Asp Ala Thr Asn Gln Met Gln Ser Ser Gly Pro Asp Gln Met Gln Tyr Gln Met Gln Ser Met Ala Ser Met Tyr 550 Gly Asn Met Arg His Pro Ser Ser Met Ala Val Pro Thr Val Gln Gly 565 Asn Ser Ala Gly Arg Met Tyr Gly Ser Arg Glu Glu Lys Gly Asn Glu 580 585

Gly Phe Thr Phe Arg Ala Thr Pro Met Asp His Ser Ala Asn Leu Cys 595 600 605

Tyr Ser Gly Ala Gly Asn Leu Val Met Gly Pro 610 615

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<400> 13

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Phe Ser Phe Ser Thr Ala Ser Ser Phe Met Ser Ser Phe Thr Asp Leu 20 25 30

Leu Ala Ser Asp Ala Tyr Ser Gly Gly Ser Val Ser Arg Gly Leu Gly 35 40 45

Asp Arg Ile Ala Glu Arg Thr Gly Ser Gly Val Pro Lys Phe Lys Ser 50 55 60

Leu Pro Pro Pro Ser Leu Pro Leu Ser Ser Pro Ala Val Ser Pro Ser 65 70 75 80

Ser Tyr Phe Ala Phe Pro Pro Gly Leu Ser Pro Ser Glu Leu Leu Asp 85 90 95

Gly Thr Phe Pro Ala Gln Thr Phe Asn Trp Lys Asn Asp Ser Asn Ala 115 120 125

Ser Gln Glu Asp Val Lys Gln Glu Glu Lys Gly Tyr Pro Asp Phe Ser 130 135 140

Phe Gln Thr Asn Ser Ala Ser Met Thr Leu Asn Tyr Glu Asp Ser Lys 145 150 155 160

Arg Lys Asp Glu Leu Asn Ser Leu Gln Ser Leu Pro Pro Val Thr Thr 165 170 175

Ser Thr Gln Met Ser Ser Gln Asn Asn Gly Gly Ser Tyr Ser Glu Tyr 180 185 190

Asn Asn Gln Cys Cys Pro Pro Ser Gln Thr Leu Arg Glu Gln Arg Arg 195 200 205

Ser Asp Asp Gly Tyr Asn Trp Arg Lys Tyr Gly Gln Lys Gln Val Lys 210 215 220

Gly Ser Glu Asn Pro Arg Ser Tyr Tyr Lys Cys Thr His Pro Asn Cys 225 230 235 240

| Pro | Thr | Lys | Lys        | Lys<br>245 |     | Glu | Arg |            | Leu<br>250 | Asp | Gly | Gln | Ile        | Thr<br>255 | Glu |
|-----|-----|-----|------------|------------|-----|-----|-----|------------|------------|-----|-----|-----|------------|------------|-----|
| Ile | Val | Tyr | Lys<br>260 |            | Ala | His | Asn | His<br>265 |            | Lys | Pro |     | Ser<br>270 | Thr        | Arg |

Arg Ser Ser Ser Ser Thr Ala Ser Ser Ala Ser Thr Leu Ala Ala Gln 280

Ser Tyr Asn Ala Pro Ala Ser Asp Val Pro Asp Gln Ser Tyr Trp Ser

Asn Gly Asn Gly Gln Met Asp Ser Val Ala Thr Pro Glu Asn Ser Ser 315 310

Ile Ser Val Gly Asp Asp Glu Phe Glu Gln Ser Ser Gln Lys Arg Glu 330

Ser Gly Gly Asp Glu Phe Asp Glu Asp Glu Pro Asp Ala Lys Arg Trp 345

Lys Val Glu Asn Glu Ser Glu Gly Val Ser Ala Gln Gly Ser Arg Thr

Val Arg Glu Pro Arg Val Val Val Gln Thr Thr Ser Asp Ile Asp Ile

Leu Asp Asp Gly Tyr Arg Trp Arg Lys Tyr Gly Gln Lys Val Val Lys 390 385

Gly Asn Pro Asn Pro Arg Ser Tyr Tyr Lys Cys Thr Ser Gln Gly Cys 410

Pro Val Arg Lys His Val Glu Arg Ala Ser His Asp Ile Arg Ser Val 425

Ile Thr Thr Tyr Glu Gly Lys His Asn His Asp Val Pro Ala Ala Arg 440

Gly Ser Gly Ser His Gly Leu Asn Arg Gly Ala Asn Pro Asn Asn

Ala Ala Met Ala Met Ala Ile Arg Pro Ser Thr Met Ser Leu Gln Ser 475

Asn Tyr Pro Ile Pro Ile Pro Ser Thr Arg Pro Met Gln Gln Gly Glu 490

Gly Gln Ala Pro Tyr Glu Met Leu Gln Gly Ser Gly Gly Phe Gly Tyr

Ser Gly Phe Gly Asn Pro Met Asn Ala Tyr Ala Asn Gln Ile Gln Asp 520

Asn Ala Phe Ser Arg Ala Lys Glu Glu Pro Arg Asp Asp Leu Phe Leu 535

Asp Thr Leu Leu Ala 545

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